SUBJECT INDEX FOR VOLUME 18, 1959

Note: Sectional (Southern and Western) meeting abstracts, by page, are identified by an asterisk. National meeting abstracts, by number, have a separate index at the end of that group of abstracts.

A

Aberdeen-Angus cattle
  Inbreeding, gestation length and calving in herd of, 820
Abstracts of papers
  Annual national meeting, 1460
  Southern section meeting, 1149
  Western section meeting, 1164
Adrenaline
  Effect of, on serum protein and vitamin A, 931
Alfalfa
  Effect of pelleting on, utilization, 336, 1074
  Energy of, meal, 796
  Value of carotene from, 288
Alfalfa hay
  Crimped, for wintering calves, 1167*
  Effect of preparation on value of, 976
  Evaluation of, by chemical analysis, 1233
Alkaline drinking water
  Effect of, on rumen, 599
Aluminum
  Effect on calcium and phosphorus retention, 187
American Society of Animal Production
  Proceedings of 50th annual meeting, 475
    American Feed Manufacturers' Award, 496
    Chairmen of committees, 511
    Fellows elected, 501
    Honor guest, 495
    Memorials, 504
    Minutes of business meeting, 481
    Morrison award, 498
Amino acids
  Deamination by rumen microorganisms, 954
Ammoniated bagasse pith
  For ruminants, 1175*
Ammoniated products
  Availability to rumen microorganisms of nitrogen, 663
Anaplasmosis anemia
  Radioisotope studies of, 1152*
Androgenic compounds
  Effect on growth and carcass, 399
Anthelmentic
  Hygromycin B as, 1161*
Antibiotic(s)
  Effect of, in treating vibriosis, 1180*
  Hygromycin B as, 1161*
  Injections and implants, 629
  Mode of action in dairy calf. III., 1378
Antipyrine
  Dilution technique, 116
Appetite stimulants
  Hypoglycemic compounds as, for pigs, 1282
Arsanilic acid
  Effect of, on selenium poisoning, 578
Aureomycin
  Effect of, on lamb gains, 1155*

B

Bagasse
  Ammoniated, for ruminants, 1175*
Barley rations
  Improvement of, for swine, 1173*
Beef cattle
  Performance in gulf coast region, 437
  Performance of steers in gulf coast region, 1103
Birth coats
  Factors affecting, of lambs, 1165*
Birthweight
  Effect of sex on, cattle, 738
Biuret
  By sheep and cattle, 1170*
  Effect on digestion in lambs, 134
  For ruminants, 1208
  Utilization of, by lambs, 1319
Bloat
  Blood changes during, 158
Blood
  Effect of hydroxyzine on, 1181*
  Progesterone content, 307
  Properties of swine, 1179*
  Relation of, constituents to gain, 314

SUBJECT INDEX FOR VOLUME 18, 1959

Note: Sectional (Southern and Western) meeting abstracts, by page, are identified by an asterisk. National meeting abstracts, by number, have a separate index at the end of that group of abstracts.

A

Aberdeen-Angus cattle
  Inbreeding, gestation length and calving in herd of, 820
Abstracts of papers
  Annual national meeting, 1460
  Southern section meeting, 1149
  Western section meeting, 1164
Adrenaline
  Effect of, on serum protein and vitamin A, 931
Alfalfa
  Effect of pelleting on, utilization, 336, 1074
  Energy of, meal, 796
  Value of carotene from, 288
Alfalfa hay
  Crimped, for wintering calves, 1167*
  Effect of preparation on value of, 976
  Evaluation of, by chemical analysis, 1233
Alkaline drinking water
  Effect of, on rumen, 599
Aluminum
  Effect on calcium and phosphorus retention, 187
American Society of Animal Production
  Proceedings of 50th annual meeting, 475
    American Feed Manufacturers' Award, 496
    Chairmen of committees, 511
    Fellows elected, 501
    Honor guest, 495
    Memorials, 504
    Minutes of business meeting, 481
    Morrison award, 498
Amino acids
  Deamination by rumen microorganisms, 954
Ammoniated bagasse pith
  For ruminants, 1175*
Ammoniated products
  Availability to rumen microorganisms of nitrogen, 663
Anaplasmosis anemia
  Radioisotope studies of, 1152*
Androgenic compounds
  Effect on growth and carcass, 399
Anthelmentic
  Hygromycin B as, 1161*
Antibiotic(s)
  Effect of, in treating vibriosis, 1180*
  Hygromycin B as, 1161*
  Injections and implants, 629
  Mode of action in dairy calf. III., 1378
Antipyrine
  Dilution technique, 116
Appetite stimulants
  Hypoglycemic compounds as, for pigs, 1282
Arsanilic acid
  Effect of, on selenium poisoning, 578
Aureomycin
  Effect of, on lamb gains, 1155*

B

Bagasse
  Ammoniated, for ruminants, 1175*
Barley rations
  Improvement of, for swine, 1173*
Beef cattle
  Performance in gulf coast region, 437
  Performance of steers in gulf coast region, 1103
Birth coats
  Factors affecting, of lambs, 1165*
Birthweight
  Effect of sex on, cattle, 738
Biuret
  By sheep and cattle, 1170*
  Effect on digestion in lambs, 134
  For ruminants, 1208
  Utilization of, by lambs, 1319
Bloat
  Blood changes during, 158
Blood
  Effect of hydroxyzine on, 1181*
  Progesterone content, 307
  Properties of swine, 1179*
  Relation of, constituents to gain, 314

Blue Grama Hay
Digestibility of, by sheep, 1168*
Boars
Reproductive performance of, 3
Fractionated ejaculates of, 374
Body measurements
Relation to beef type and carcass, 108
Relations between scores and, in steers, 880
Body surface area
Prediction of, in pig, 1179*
Body water
Determination of, in ruminants, 116
Body weight
Maternal influence on, 519
Branding fluids
Factors affecting legibility, 1183*
Breeding performance
Daytime cooling of rams and, 392
Delayed shearing of ewes and, 392
Factors affecting, of sheep, 1157*
Breeding system
Effect of, in Aberdeen-Angus herd, 820

C

Calcium
Effect of aluminum and zinc retention, 187
Calculi
Effect of sodium silicate on, 1025
Calorie-protein ratio
Response of pigs to, 1159*
Carcass
Effect of estrogenic and androgenic compounds, 399
Evaluation—lean cuts as criteria of live hog values, 420
Muscle and bone in beef, 1154*
Muscling qualities of swine, 1179*
Ribeye and separable lean of beef, 1155*
Carcass characteristics
Body measurement in relation to, 108
Effect of feeding sugar on, 1405
Effect of fiber on, of swine, 1397
Effect of stilbestrol on, 227
Influence of hormone on, of steers, 1010
Influence of triiodothyronine on, in swine, 1018
Of swine under full and limited feeding, 211
Carcass cut-outs
Lumbar lean measures as related to, 1087
Carcass development
Effect of protein level and quality on, 755
Carcass evaluation
Dressing percent as criterion, 589
Fat cuts as criteria, 583
Loin equivalents as criterion, 594
Carcass grade
Effect on boneless beef yield, 95
Relation of, in steers to consumer preference, 894
Carcass measurements
Relation to live animal measurements, 991
Relation to breed in lambs, 1167*
Carcass merit
Stilbestrol effect on, of lambs, 1255
Carcass quality
Effect of stilbestrol and pelleting on, 1114
Carcass studies
On steers and bulls sold as slaughter calves, 1154*
Carotene
Liver and plasma in cattle, 874
Relative value of, and Vitamin A, 288
Castration
Effect of, on lambs, 1159*
Cellulose
Digestion *in vitro*, 275
Forage, digestion in ruminants, 275
Cellulose, purified and forage
Influence of physical properties of, on their digestibility, 655
Chicken litter
Utilization by cattle, 1150*
Chromic oxide
Fecal excretion pattern of, by heifers, 718
Citric acid
Content of boar semen, 374
Columbia lambs
Factors affecting birth coat of, 1165*
Combining ability
In three-line crosses of swine, 790
Commercial cow-calf herd
Management for, under fall calving program, 1152*
Concentrate:roughage ratio
Effect on fattening lambs, 1114
Conformation
Factors affecting, of lambs, 1094
Conformation scores
In yearling steers, 880
Relation to production factors and body measurements, 894
Corn
Oats as replacement for, 701

Corn silage
For fattening steer calves, 1243
Corpora lutea
Effect of exogenous progesterone on, 163
Corpus luteum
Effect of progesterone on, 1327
Creatine
As nitrogen source for ruminant, 780
Digestion in lambs, 134
Crossbred swine
Performance of, 1162*

D

Diethylstilbestrol
Absorption of, pellets, 1201
Effect on biuret and urea utilization, 1319
Digestibility
Determination by fecal chromogen, 683
Effect of fistulation on, 206
Effect of pelleting on, of alfalfa, 1074
Influence of intake on, 1299
Lignin as related to decreased, 365
Of forage cellulose, 275
Relation of lignin to, 1292
Digestion
Starch, by pigs, 964
Docking
Effect of, on lambs, 1159*
Drakett protein
Biological evaluation, 1158*
Dwarf-carrier cattle
Blood constituents of, 947
Responses to stress, 1128

E

Embryo survival
Early, in ewes, 1308
Energy
Alfalfa meal as source of, 796
Comparative, value of hays, 1150*
Effects on reproduction, 40, 347
Relationship to TDN of forages, 690
Requirements for maintenance and gain, 528
Supplements for swine, 1170*
Esophageal-fistulated sheep
Composition of forage collected by, 641
Estrogen(s)
Effect of, on embryonic mortality, 607
Excretion by cows after oral stilbestrol, 178
Failure to detect, in tissues, 221
Value of, for cattle, 1176*
Estrogenic activity
Determination of, in forage, 1000
Estrogenic compounds
Effect on growth and carcass, 399
Estrous cycle
Hormone potency of pituitary during, 675
Estrus
Induction of, in sheep, 1388
Synchronization of, and ovulation, 909
Excreta collection
Apparatus for wethers, 935
Exercise
Effect of, on ham muscles, 153, 173
Extension Animal Husbandman's award, 855

F

Fall calving program
Management of cow-calf herd under, 1152*
Fat
Blood, levels in swine, 561
Effect of animal, and protein on cattle, 567
Rate of deposition in swine, 127
Fat and lean
Effect of ration on color, 241
Fatness
Relation of in steers to consumer preference, 894
Ultrasonic measurement of, 815
Fatty acids
Production of, by sheep, 1168*
Fecal chromogen
Digestibility determination by, 683
Feces
Collection from cows, 1220
New technique for collection of, 671
Preservation of wet, without loss, 650
Feed preference
Of sheep, 1158*
Feed use
Estimating, for growth and maintenance, 548
Feeding methods
Lamb response to, 1168*
Fertilization
Rate in ewes, 1308
Fiber
Effect of, in swine rations, 1397
Utilization of, for swine, 1161*
Fine-wool rams
Selection of, 925

Fistulation
Effect of, on digestibility, 206
Forage
Nutritive value of, by artificial rumen technique, 770
Relationship between TDN and DE of, 690
Techniques for evaluating grazed, 1173*

G

Genetic and phenotypic parameters
Correlations, 331
Heritability estimates, 323
Gestation length
Differences in, of cattle, 1153*
Grain preparation
Effects of, on preference, 1333
Grazing
Effect of rotational, 1177*
Effect of intensity of, on nutritive content of diet, 1031
Growth and maintenance
Energy requirements for, 528
Estimating feed use for, 548

H

Hair coat
Seasonal changes in, in cattle, 1164*
Ham muscle
Characteristics of classes, 146
Effect of exercise on, 153
Effect of high sucrose on, 173
Hams
Variation of myoglobin in, 1080
Hay
Comparative energy value of Bermuda, peanut and alfalfa, 1150*
Evaluation of nitrogen fertilized, 1171*
Pangola in steer rations, 1149*
Pelleted and chopped for cattle, 1177*
Heat tolerance
In beef cattle, 91
Hemoglobin levels
Effect of iron treatment on, 415, 1373
Hereford dwarf
Carcass characteristics, 1166*
Heritability estimates, 622
Growth to age of heifers, 918
Honorary Fellows
Nomination and selection of, 858
Hormone implants
Effect of, on steer gains, 1176*
Hormone implants—Cont.
For suckling calves, 1172*
Influence on gains and carcass, 1010
Hormone potency
Gonadotrophic and lactogenic of gilt pituitary, 675
Hormones
Effect of ovarian, on lambs, 1156*
Effect on wool growth, 1182*
Effects and tissue assays, 75
In lamb feeding, I., 64
In lamb feeding, II., 75
Hydroxyzine
Effect on lambs, 227, 710
Effect on steers, 1181*
Hygromix
As a hog wormer, 1174*
Hygromycin
Effect of, on lambs, 227
Effect of, on pigs, 1067
Hygromycin B
As antibiotic and anthelmentic, 1161*
In preventing parasite infestation, 1161*

I

Inbreeding
Effect of, in inbred lines of beef cattle, 1164*
Iodine-131
Uptake and release in dairy goats, 1135
Iron
Administration in pig anemia, 256, 410
Effect of method and level of administration, 1373
Intramuscular, treatment of dams, 415
Iron-deficiency anemia
Prevention of, in pigs, 1409
Iron, injectable
Effect on range calves, 1180*

L

Lamb measurements
Relationship between live, and meatiness, 1165*
Lambing
Factors affecting early, 1157*
Selection for early, 1157*
Lespedeza hay
Composition and nutritive quality, 763
Lignin
Rapid determination of acid-insoluble, 1292
Relation to digestibility of forage, 365

Loin eye area
Lumbar lean measures as related to, 1087
Lysine
Requirement of weanling swine, 1059
Supplementation for pigs, 1053

M

Magnesium
Requirement of pig, 264
Marbling
Estimation of, in beef, 959
Meat, quality of produced by steers
Carcass data, 1154*
Feeding data, 1153*
Mesquite wood
As roughage for steers, 1174*
Methionine
Supplementation for pigs, 1053
Methylandrosterediol
Effect of, on swine, 1189
Methyltestosterone
Effect of, on swine, 1189
Molasses rations
For swine, 1172*
Mothering ability
Factors associated with, in cattle, 938
Muscle-bone
Relationship in beef, 1271
Muscle differential development
Skeletal development in relation to, 1166*
Myoglobin
Variations of, in hams, 1080

N

News and Notes, 512, 859, 1184, 1580

O

Oat hulls
Growth inhibitory effect of, 1356
Oat silages
Digestibility, 671
Oats
As replacement for corn, 701
Oleandomycin
Evaluation of, in fattening rations, 1169*
Ovulation
Synchronization of, and estrus, 909
Oxytetracycline
Effect on lambs, 710
Effect on range calves, 1180*
Oxytetracycline—Cont.
Effect on steers, 198
In wintering rations of cattle, 1171*
Oxytocin
Effect on fertility in artificially inseminated gilts, 634
Response to, in bovine pregnancy, 865

P

Parasite infestation
Hygromycin B in preventing, 1161*
Pasture
Pigs fattened on, 1162*
Protein supplement for pigs on alfalfa, 1162*
Peanut oil meal
Supplements to, for swine, 1119, 1160*
Pellet size
Effect of, on fattening lambs, 1168*
Pelleted hay
Response of cattle to, 1177*
Pelleted rations
Compared to chopped and ground, 805
Pelleting
Effect of, on alfalfa meal, 1074
Effect of, on alfalfa utilization, 336
Effect of, on fattening lambs, 1114
Rations for lambs, 1264
Phenothiazine
Effect of, on lamb gains, 1155*
Phosphatase
Serum alkaline and growth, 361
Phosphate
Combinations of, for swine, 555
Phosphorus
Effect of aluminum and zinc on retention, 187
In wintering rations of cattle, 1171*
Measuring requirements of cattle, 249
Pigs
Influence of 3-week weight on 8-week weight, 104
Performance in drylot vs. pasture, 1162*
Pituitary
Gilt, during estrous cycle and pregnancy, 675
Gonadotrophic content, 355
Pork curing
Effect of temperature rise on, 1163*
Pork quality
Muscle characteristics, 448
Post-weaning growth
Heritability estimates of, of heifers, 918

Pregnancy
Diagnosis of bovine, 865
Gonadotrophic content of pituitary in early, 355
Hormone potency of pituitary during, 675
Production factors
Relation to scores and measurements, in steers, 894
Productivity of range sheep
Effect of nutrition on, 1416
Progesterone
Effect on corpora lutea and embryo survival, 163
Effect of exogenous, on corpus luteum, 1327
Effect on embryonic mortality, 607
In reproductive organs and blood, 307
Progesterone-PMS
Effect of, on reproduction of ewes, 1156*
Protein
Blood serum, and age, 983
Level and quality for swine, 755
Relation of crude, to digestible in forage, 1339
Supplements for swine, 1162*, 1170*,

R

Rahmani sheep
Selecting yearling, 1452
Rambouillet lambs
Factors affecting birth coat of, 1165*
Factors affecting postweanling traits of, 1164*
Range and pasture forage
Hand clipped vs. collected by esophageal-fistulated sheep, 641
Rangemeter
Improved, for sheep, 1447
Red clover
Effect on reproduction, 1178*
Red Sindhi crossbred cattle
Gestation length, birthweight and age at calving, 1430
Growth and characteristics of, 1038
Reproduction
Effect of energy, 347
Effect of energy and season, 40
Effect of nutrition, 1160*
Effect of plane of nutrition, 3
Effect of red clover, 1178*
Effect of selenium, 141
Effect of temperature and progesterone-PMS, 1156*
Reproduction—Cont.
Embryo survival in gilts, 48
Prenatal, in gilts fed stilbestrol, 298
Semen characteristics and relation to, 55
Reproduction in yearling ewe
Fetal development, 463
Ovulation rate and embryo survival, 453
Reserpine
Effect on lambs, 227
Roughage
Ground mesquite wood as, 1174*
Rumen
Artificial, technique, 770
Rumen fistula
Pneumatic plug for, 830
Rumen microorganisms
Availability of nitrogen in ammoniated products, 663
Effect of alkaline drinking water on, 599
Deamination *in vivo* by, 954
Digestibility of cellulosis by, *in vitro*, 655
Rumen products
Feed value and activity of, 849
Ruminant
Determination of body water in, 116
Sarcosine and creatine N for, 780

S

Saccharin
Effect of, on intake of starter rations by pigs, 1350
Sarcosine
As nitrogen source for ruminant, 780
Selenium
Effect of, on reproduction, 141
Selenium poisoning
Effect of arsanilic acid on, 578
Semen characteristics
Relation to reproductive performance, 55
Summer, of rams, 1157*
Sex
Effect on birthweight and gain of cattle, 738
Shearing
Delayed, and breeding performance, 392
Effect of, on lambs, 1250
Silage
Supplements to, for steers, 32
Value of, for finishing calves, 1153*
Skeletal development
Relation to muscle development, 1166*

Snorter dwarfism
Detecting animals heterozygous for, 1438
Sodium fluoride
Effect of, on pigs, 1067
Sodium silicate
Effect on urinary calculi and constituents, 1025
Southern section meeting
Abstracts of papers, 1149
Spermatozoa
Freezing of ram, 622
Spring lambs
Condition and conformation of crossbred, 1094
Starch
Digestion of, by pigs, 964
Starter rations
Saccharin in, for pigs, 1350
Stilbestrol
Effects on cattle performance, 1151*
Effect of, on fattening lambs, 1114
Effects on grazing beef steers, 1151*
Effect of, on lambs, 227, 1255
Effect of, low dosage, 1169*
Effect of, on protein requirement, 1243
Effects of, on steer carcasses, 1166*
Effect of, on steers, 198
Estrogen excretion after oral, 178
Failure to detect estrogen in tissues of steers fed, 221
Feeding to immature ruminants, 427
For fattening steers, 14
For swine, 1160*
Implanted in bulls, 1154*
Implantation, effect on lambs, 710
Prenatal reproductive performance in gilts fed low levels of, 298
Stillbirths
In range cattle, 85
In swine, 1181*
Straightbred swine
Performance of, 1162*
Stress
Simulated snowbound, on ewes, 694
Sucrose
Effect on pork ham muscle, 173
Summer environment
Modified, and growing swine, 1180*, 1367

T

Tallow
For swine, 1160*
Targhee lambs
Factors affecting birth coat of, 1165*
Temperature
Effect of, on puberty, 1363
Effect of, on reproduction, 1156*
Testosterone
Effect of, on growth of steers, 1169*
Effect of, on steer carcasses, 1166*
Tetrahydrozoline
Effect on cattle, 1181*
Three-line crosses
Combining ability among, of swine, 790
Thyro-Active compounds
Effect on swine during lactation, 825
Thyroid secretion rate
Estimation in dairy goats, 1135
Thyroprotein
Effect of, on swine, 1189
For lactating sows, 1224
Tocopherol
Sensitivity of tissue to intake, 232
Topcross breeding
With outbred and inbred Hereford sires, 745
Total Digestible nutrients
Relationship to energy of forages, 690
Trace minerals
Value of, in cattle rations, 1196
Tranquilizer(s)
Effect on cattle, 1181*
Effect on steers, 198, 1173*
For beef cattle, 1172*
For fattening lambs, 1158*
For swine, 1160*
In wintering rations of heifers, 1175*
Triiodothyronine
As lactation stimulant for swine, 843
Influence of, on carcass of swine, 1018

U

Uark Poland Chinas
Response to calorie-protein ratios, 1159*
Ultrasonic
Measurement of fatness, 815
Uramite
Effect on digestion in lambs, 134
Urea
Effect on digestion in lambs, 134
Utilization of, by sheep and cattle, 1170*
Utilization of, by lambs, 1319
Urinary calculi
Formation in steers, 383
Urine
Collection from cows, 1220

V

Veal production
Effect of feeding methods I, 726
Effect of feeding methods II, 732
Vibriosis
Treatment of, with antibiotics, 1180*
Virginia feeder calf sales
Effects of variables on prices, 1151*
Vitamin A
Effect of adrenaline on metabolism of, 931
Liver and plasma, in cattle, 874
Value of, from dry carrier, 288
Vitamin B_{12}
Supplemental for ruminant, 780
Vitamin D
Effect of, on lambs, 1250

W

Weaning
Factors influencing, weight of cattle, 1149*
Weaning—Cont.
Relationship of 120-day and, daily gains of calves, 1149*
Western section meeting
Abstracts of papers, 1164
White muscle disease
Blood composition in, 1178*
Winter conditions
Effect of, on feedlot steers, 1177*
Wintering rations, 1175*
Effects on dams and calves, 21
Wool
Effect of hormones on growth, 1182*
Yield from dimensional measurements, 1182*

Z

Zinc
Effect on calcium and phosphorus retention, 187
Toxicity in pig, 836

AUTHOR INDEX FOR VOLUME 18, 1959

Note: Sectional (Southern and Western) meeting abstracts, by page, are identified by an asterisk. National meeting abstracts, by number, have a separate index at the end of that group of abstracts.

A

Acker, D. C., 1053, 1255
Aldinger, S. M., 555, 1350
Alexander, G. I., 1164*
Allen, N. N., 726, 732
Alliston, C. W., 1156*
Alsmeyer, R. H., 1405
Alsmeyer, W. L., 361
Andersen, P. E., 1299
Anderson, G. C., 134, 780, 1319
Anderson, L. L., 607, 675, 909
Anderson, M. J., 1299
Anderson, V. L., 127
Andrews, F. N., 127, 227, 399, 1388
Anglemier, A. L., 1166*
Anthony, W. B., 1150*
Appel, P. P., 710
Armstrong, D. T., 75
Arthaud, R. L., 314, 738
Arthaud, V. H., 314, 1010
Ashton, G. C., 555
Aunan, W. J., 1080

B

Baird, D. M., 1160*
Baker, Bryan, 1156*
Baker, F. H., 1158*, 1196
Baker, T. I., 655
Barnhart, C. E., 3, 1162*, 1189
Barrick, E. R., 241
Barth, K. M., 690
Bartley, E. E., 1378
Baugus, C. A., 1159*
Becker, C. F., 1167*
Becker, D. E., 701, 825, 836, 1059, 1356
Beeson, W. M., 227, 264, 399, 1264
Bell, M. C., 187
Bennett, James A., 1167*
Bentley, O. G., 275, 365, 655, 663
Bernbeck, Con, 1167*
Bialy, G., 374
Bickoff, E. M., 1000
Blackmore, D. W., 1170*
Blair, J. W., 935
Blaser, R. E., 21
Blincoe, Clifton, 1178*
Blumer, T. N., 241, 959
Bogart, Ralph, 1094, 1164*
Bohman, V. R., 567, 1173*
Boller, K. A., 1168*
Bond, T. E., 1180*, 1367
Booth, A. N., 1000
Botkin, M. P., 1165*
Boyd, L. H., 1158*
Bradford, G. E., 1250
Brady, D. E., 420, 583, 589, 594
Bratzler, L. J., 991, 1087, 1271
Bray, R. W., 146, 153, 173, 726, 732, 755
Brethour, J. R., 249
Brink, M. F., 836
Briskey, E. J., 146, 153, 173
Brooks, C. C., 1119, 1160*
Brooks, J., 780
Brown, C. J., 938, 1158*
Brown, H., 1189
Brown, K. I., 392
Bruner, W. H., 448
Brunstad, G. E., 211
Bryant, H. T., 21
Butcher, John E., 1416
Buric, J., 548
Burroughs, W., 427

C

Cahill, V. R., 108, 448, 745, 1243
Campbell, C. D., 134, 780, 1319
Carlton, W. W., 1308
Carmon, J. L., 14, 1161*
Carpenter, J. W., 1405
Carter, R. C., 323, 331, 1151*, 1159*
Casida, L. E., 163, 453, 463, 1327
Cason, J. L., 690
Cassard, D. W., 694
Catron, D. V., 555, 1053, 1224, 1350, 1409
Caveness, J. W., 1158*
Chamberlain, C. C., 1161*
Chambers, Doyle, 55
Chapman, A. B., 453, 463
Cheng, C. S., 1363
Church, D. C., 1168*
Clanton, D. C., 1416
Clark, R. T., 85, 880, 894
Clegg, M. T., 1176*
Cobb, Estel, 1172*
Cockerham, C. C., 519
Cole, J. W., 1155*
Combs, G. E., 361, 843, 1018, 1282, 1405
Connell, R., 1182*
Cook, C. W., 1031
Corbett, W. J., 548
Cox, D. F., 519
Craig, H. B., 241
Crawford, W. P., 1169*
Cresswell, Eric, 1447
Crothers, W. C., 683
Crown, R. M., 437, 1103
Cullison, A. E., 14
Cunha, T. J., 1155*
Cunningham, H. M., 964
Curtis, J. M., 221

D

Dale, H. E., 1363
Damon, R. A., Jr., 91, 1103
Daugherty, F. C., 1171*
Davey, R. J., 64, 75
Davidson, T. J., 1158*
Davis, R. E., 718

Davis, W. F., Jr., 843
Day, B. N., 607, 675, 909
Deans, R. J., 1087
de Baca, R. C., 1094
Deyoe, C. W., 1128
Dobie, J. B., 976
Dollahon, J. C., 947, 1149*, 1156*, 1157*
Drake, C. L., 1333
Drewry, K. J., 938
Drori, D., 206
Dross, M. W., 1168*
Dudley, W. A., 825
Dutt, R. H., 3, 1157*, 1308
Dyer, I. A., 383, 874, 1181*

E

Easley, G. T., 55
Eaton, H. D., 232, 288
Edgar, R. A., 1156*
Elam, C. J., 383, 718
Ellington, Earl F., 1308
Embry, L. B., 849, 1025
Emerick, R. J., 1025
Emmerson, M. A., 607
Engel, R. W., 21
England, D. C., 1166*, 1169*
Ensminger, M. E., 1166*, 1179*
Ercanbrack, S. K., 1164*, 1165*, 1180*, 1183*
Erwin, E. S., 931, 935

F

Felts, Hugh, 1153*
Fisher, C. E., 1174*
Flamboe, E. E., 1135
Flatt, W. P., 650
Fleming, H. P., 959
Fletcher, J. L., 1430
Flower, A. E., 1170*, 1175*
Fontaine, W. E., 1388
Fontenot, J. P., 1151*
Foote, L. E., 1152*
Foote, W. C., 453, 463, 1167*
Forbes, R. M., 1170*, 1208
Fowler, S. H., 211
Fox, C. W., 1168*, 1178*
Frank, F. W., 1180*
Frederiksen, K. R., 1164*

G

Gaines, J. A., 1151*, 1159*
Gaither, William, 1208
Garrett, W. N., 116, 528, 805
Garrigus, U. S., 629, 1170*, 1208
Gaskill, R. L., 336
Gass, G. H., 221
Ginger, Irene D., 1080
Godbey, E. G., 1153*, 1154*
Godley, W. C., 614, 1157*
Gossett, J. W., 40, 48
Graf, R. L., 95
Grainger, R. B., 1158*
Green, W. W., 548, 865
Gregory, K. E., 738, 1010
Greiman, B. J., 1158*
Griffin, S. A., 1161*
Grifo, A. P., Jr., 232
Grummer, R. H., 146, 153, 173, 410, 415, 755
Gurland, J., 178

H

Haenlein, G. F. W., 683
Hafez, E. S. E., 1166*, 1178*, 1179*, 1181*
Hahn, LeRoy, 1180,* 1367
Haines, C. E., 347, 355
Hale, O. M., 1162*
Hale, W. H., 198, 710, 1169*, 1201
Hall, O. G., 1153*
Ham, W. E., 383
Hammes, R. C., Jr., 21
Hanning, F. M., 732
Hansard, S. L., 187, 249, 1152*
Hansel, W., 75
Hanson, L. E., 104
Harbers, L. H., 599
Harper, Claude, 1264
Harper, J. E., 894
Harris, L. E., 1031, 1416, 1447
Hartman, R. H., 1114
Hartsook, E. W., 770
Harvey, W. R., 91
Hatcher, B. W., 158
Hatfield, E. E., 1170*, 1208
Hawkins, G. E., 763
Hays, V. W., 555, 1053, 1224, 1350, 1409
Hazel, L. N., 607, 675, 790, 815, 909
Hearn, W. R., 307
Heck, M. C., 1163*
Heitman, H., Jr., 796, 1180*, 1367
Heller, V. G., 32
Hendrickson, A. P., 1000
Hentges, J. F., 947
Hershberger, T. V., 663, 770
High, Joe W., Jr., 1149*, 1438
Hill, D. L., 671
Hill, J. R., Jr., 614
Hobbs, C. S., 1149*, 1153*, 1438
Hochstetler, L. N., 1397
Hodges, E. M., 1149*
Hoefer, J. A., 256, 1397
Hoekstra, W. G., 146, 153, 173
Holleman, R. G., 1114
Holter, J. A., 1339
Honea, R. S., 938
Hopkins, L. L., Jr., 1171*
Horn, L. H., 1114
Hubert, Farris, 1171*, 1177*, 1180*
Hulet, C. V., 1180*
Hull, J. L., 976
Humphrey, R. D., 32, 1180*
Hunter, J. E., 880, 894
Hurst, V., 614, 1157*

I

Ingalls, J. E., 738, 1010
Ittner, N. R., 805
Iwanaga, I. I., 1172*

J

Jackson, H. D., 158
Jacobson, W. C., 650
Jensen, A. H., 701, 825, 836, 1059, 1356
Jensen, E. H., 1173*
Johnson, C. E., 599, 830
Johnston, C. W., 1224
Johnson, J. C., 1038, 1430
Johnson, J. D., 1151*

Johnson, R. R., 655
Johnston, Alexander, 1182*
Jordan, H. A., 1175*
Judge, M. D., 448

K

Kamstra, L. D., 849
Kane, E. A., 650
Karam, H. A., 1452
Kelley, R. F., 1151*
Kelly, C. F., 1180*, 1367
Kemp, J. D., 1189
Kennick, W. H., 1166*
Kennington, M. H., 1264
Kercher, C. J., 1167*, 1172*, 1176*
Kidwell, J. F., 880, 894
Kincaid, C. M., 21, 91, 323, 331, 1155*, 1438
Kirk, W. G., 1149*
Kline, E. A., 815
Klosterman, E. W., 108, 622, 745, 1243
Knight, A. D., 1167*
Koch, B. A., 1196
Koch, R. M., 314, 738, 1010
Koger, M., 361, 947, 1155*
Kowalczyk, T., 410, 415
Kropf, D. H., 95, 755, 1154*
Kuhn, G., 1201
Kunkel, H. O., 1128
Kunkel, L. E., 448
Kyle, W. H., 1183*

L

Lance, R. D., 726
Larsen, L. M., 1173*
Larsen, J. T., 1182*
Larsen, Svend-Aage, 1182*
Larson, B. L., 983
Lasley, J. F., 420, 583, 589, 594
Legates, J. E., 519
Lesperance, A. L., 1173*
Leverton, Ruth, 1255
Lewis, J. M., 629
Lindahl, I. L., 1074
Lindley, C. E., 55, 1149*
Litton, G. W., 1151*
Livingston, A. L., 1000
Lofgreen, G. P., 116, 528, 805, 1233
Loggins, P. E., 1155*
Long, T. A., 770
Looper, C. G., 954
Loosli, J. K., 206
Lowrey, R. S., 1373
Luecke, R. W., 256, 1397
Luther, H. G., 198, 710, 1169*, 1201
Lyman, R. L., 1000

Mc

McCable, G. E., 1018
McCaleb, J. E., 1149*
McCampbell, H. C., 1160*
McClaugherty, F. S., 1159*
McCormick, W. C., 1162*
McCraine, S. E., 437, 1103
McDowell, R. E., 1038, 1430
McGowan, B., 1250
McKee, K. M., 1170*
McKenzie, F. F., 1178*
McKenzie, K. W., 1170*
McLaren, G. A., 134, 780, 1319
McQuire, J. A., 1157*
McWard, G. W., 1059

M

MacFadden, D. L., 1378
MacVicar, Robert, 1255
Madsen, Robert, 1173*
Magee, W. T., 790, 991, 1271
Maner, J. H., 1373
Mansfield, M. E., 629
Marble, D. W., 1173*
Marchello, J. A., 1175*
Marion, P. T., 1173*, 1174*
Martz, F. A., 671
Mauer, R. E., 1179*, 1181*
Mayo, R. H., 264
Meade, J. H., Jr., 1149*
Means, T. M., 1388
Meinershagen, W. A., 1180*
Melampy, R. M., 178, 307, 607, 675, 909
Meyer, J. H., 116, 336, 528, 796, 805, 976, 1233
Miller, C. O., 1174*
Miller, E. R., 256
Moberly, J. S., 1158*
Moore, L. A., 232
Moorman, R. P., 1162*
Morris, Eula, 1255
Moxon, A. L., 275, 655, 663, 1243
Myers, G. S., Jr., 288

N

Nelson, A. B., 1151*
Neumann, A. L., 1170*, 1208
Neville, W. E., 1160*
Niedermeier, R. P., 726, 732
Noffsinger, T. L., 127
Noland, P. R., 1159*, 1161*
Noller, C. H., 671
Norris, C. E., 1018
Norton, H. W., 1059

O

Oldfield, J. E., 1173*, 1178*
Olson, O. E., 141, 578, 1025
Oltjen, R. R., 1196
O'Mary, C. C., 14, 1166*
Orme, L. E., 991, 1155*, 1271
Otagaki, K. K., 1172*, 1175*
Overfield, J. R., 1162*

P

Page, H. M., 935
Palmer, A. Z., 1018, 1405
Parks, P. F., 1150*
Peacock, F. M., 1149*
Pearson, A. M., 991, 1087, 1271, 1397
Pekas, J. C., 1282
Perry, T. W., 227, 399, 1264
Phillips, P. H., 146, 153, 173, 755
Pieper, Rex, 1031
Pilkington, D. H., 1154*
Plumlee, M. P., 264
Pond, W. G., 1373
Pope, A. L., 453, 463, 1327
Pope, L. S., 32, 1151*, 1152*, 1154*, 1255
Prescott, J. M., 599, 830
Price, D. A., 1164*, 1165*, 1180*, 1183*

Pritchard, W. R., 158
Putnam, P. A., 718

Q

Quicke, G. V., 275, 365, 655

R

Ragsdale, A. C., 1363
Rakes, J. M., 178, 307
Ralston, A. T., 874, 1181*
Ray, Maurice L., 1150*, 1333
Reed, F. E., 954
Reid, J. T., 1299, 1339
Reineke, E. P., 1135
Repp, W. W., 1168*
Reynolds, P. J., 1074
Reynolds, W. M., 198, 710, 1169*, 1201
Rice, H. C., 1157*
Richards, C. R., 683
Riggs, J. K., 820
Robison, E. D., 1174*
Rollins, W. C., 918
Rousseau, J. E., Jr., 232, 288
Rupnow, E. H., 726, 732, 1166*
Russell, T. S., 1179*
Rydberg, M. E., 410, 415

S

Sawyer, W. A., 1171*
Schein, M. W., 1038
Schmidt, D. A., 256
Schnell, R. B., 1201
Schultze, A. B., 314
Schweigert, B. S., 1080
Schoonover, C. O., 1165*
Scott, H. W., 275
Scott, W. K., 1159*, 1161*
Seerley, R. W., 256
Self, H. L., 163, 374, 410, 415, 561, 634
Sewell, R. F., 1161*
Shackelford, R. W., 1161*
Shaw, R. A., 158
Shelby, C. E., 880, 894
Shelton, Maurice, 925
Sherman, W. C., 198, 710, 1169*, 1201
Shrode, M. C., 1128
Shrode, R. R., 820
Simpson, E. C., 1157*
Singletary, C. B., 437, 1103
Skelton, W. P., 1171*
Skimabukuro, Paul, 1175*
Slen, S. B., 1182*
Smith, E. F., 1196
Smith, G. S., 134, 780, 1319
Smith, H. J., 1149*, 1162*, 1438
Smith, V. R., 634
Sorensen, A. M., Jr., 40, 48
Southwell, B. L., 1162*
Speer, V. C., 555, 1224, 1350, 1409
Spies, H. G., 163
Spurlock, G. M., 1250
Staheli, D. L., 1114
Stallcup, O. T., 954
Stanley, Marion, 1165*
Steele, D. G., 1157*
Stephens, D. F., 1152*
Stillions, M. C., 671
Story, C. D., 1171*
Strong, H. T., 1176*
Struempler, A. W., 427
Stephens, D. F., 32
Stob, M., 227, 399
Stoewsand, G. S., 336
Stratman, F. W., 634
Stroud, J. W., 1158*, 1299
Sullivan, J. T., 1292
Swett, W. W., 1038
Swift, R. W., 770

T

Tallis, G. M., 108, 622, 745
Tavenner, H. W., 865
Taylor, J. C., 1149
Taylor, N. O., 1169*
Teague, H. S., 298
Ternan, P. R., 880, 894
Terrill, C. E., 1165*
Terrill, S. W., 701, 825, 836, 1059, 1356
Teter, W. S., 104
Thomas, H. R., 1119, 1160
Thomas, O. O., 1170*, 1174*, 1175*
Thompson, A., 187
Thompson, R. C., 1172*, 1176*
Thornton, J. W., 1153*
Thurber, H. E., 1176*
Tillman, A. D., 249
Torell, C., 567, 694
Torell, D. T., 641, 1177*, 1250
Touchberry, R. W., 983

U

Ullrey, D. E., 256
Umberger, E. J., 221

V

Vander Noot, G. W., 690
Vandeopouliere, J. M., 1282
van Es, A. J. H., 1220
Varnell, T. R., 931
Varney, W. Y., 1189
Vernon, E. H., 91
Vogt, J. E., 1220

W

Wade, M. A., 567
Wagnon, K. A., 918
Wahlstrom, R. C., 141, 578, 1067
Wallace, H. D., 347, 361, 843, 1018, 1282, 1405
Wallace, Joe D., 1171*, 1177*, 1180*
Walters, L. E., 32, 1152*, 1154*
Warnick, A. C., 347, 355, 843, 947, 1155*
Warnick, E. J., 91
Watkins, W. E., 1168*
Wayman, O., 1172*
Weaver, L. A., 420, 583, 589, 594
Webb, R. J., 629
Weeth, H. J., 694
Weir, W. C., 336, 641, 805, 976, 1177*, 1250
Welch, J. A., 134, 780, 1319
Wellington, G. H., 64
West, D. R., 256
Whatley, J. A., Jr., 55
Wheat, J. D., 820
Wheeler, A. C., 1271
Wheeler, R. F., 1153*, 1154*
White, E. A., 1201
Whiteker, M. D., 1189

Whiteman, J. V., 392, 1255
Williams, C. M., 1177*
Williamson, K. C., 1151*
Wilson, G. D., 1080
Wilson, L. O., 1165*, 1183*
Wilson, R. L., 1157*
Wiltbank, J. N., 1153*
Woodward, R. R., 85
Woody, C. O., 1156*
Woolfolk, P. G., 1158*

Y

Young, E. P., 298

Z

Zimbelman, R. G., 1327
Zimmer, P. R., 849
Zimmerman, D. R., 163, 1409
Zobrisky, S. E., 420, 583, 589, 594